

Proposal Title: Suisun Marsh Fish Screen Program
Applicant Name: California Department of Fish and Game
Mailing Address: 4001 North Wilson Way
Telephone: (209) 948-7800
Fax: (209) 946-6355
Email: jstarr@delta.dfg.ca.gov

State cost 18.54% Federal cost 19.9%

<input type="checkbox"/> Natural Flow Regimes	<input type="checkbox"/> Beyond the Riparian Corridor
<input type="checkbox"/> Nonnative Invasive Species	<input type="checkbox"/> Local Watershed Stewardship
<input type="checkbox"/> Channel Dynamics/Sediment Transport	<input type="checkbox"/> Environmental Education
<input type="checkbox"/> Flood Management	<input type="checkbox"/> Special Status Species Surveys and Studies
<input type="checkbox"/> Shallow Water Tidal/Marsh Habitat	<input type="checkbox"/> Fishery Monitoring, Assessment and Research
<input type="checkbox"/> Contaminants	<input checked="" type="checkbox"/> Fish Screens

☒ State agency
☐ Public/Non-profit joint venture
☐ Local government/district
☐ University
☐ Other: _____

☐ Federal agency
☐ Non-profit
☐ Tribes
☐ Private party

Indicate the primary species which the proposal addresses (check all that apply):

- | | |
|---|---|
| <input checked="" type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | <input checked="" type="checkbox"/> Spring-run chinook salmon |
| <input checked="" type="checkbox"/> Winter-run chinook salmon | <input checked="" type="checkbox"/> Fall-run chinook salmon |
| <input checked="" type="checkbox"/> Late-fall run chinook salmon | <input checked="" type="checkbox"/> Longfin smelt |
| <input checked="" type="checkbox"/> Delta smelt | <input checked="" type="checkbox"/> Steelhead trout |
| <input checked="" type="checkbox"/> Splittail | <input checked="" type="checkbox"/> Striped bass |
| <input checked="" type="checkbox"/> Green sturgeon | <input checked="" type="checkbox"/> All chinook species |
| <input checked="" type="checkbox"/> White sturgeon | <input checked="" type="checkbox"/> All anadromous salmonids |
| <input type="checkbox"/> Waterfowl and Shorebirds | <input checked="" type="checkbox"/> American shad |
| <input type="checkbox"/> Migratory birds | |
| <input type="checkbox"/> Other listed T/E species: _____ | |

Indicate the type of project (check only one box):

- | | |
|---|---|
| <input type="checkbox"/> Research/Monitoring | <input type="checkbox"/> Watershed Planning |
| <input type="checkbox"/> Pilot/Demo Project | <input type="checkbox"/> Education |
| <input checked="" type="checkbox"/> Full-scale Implementation | |

Is this a next-phase of an ongoing project?	Yes _____	No <u>X</u>
Have you received funding from CALFED before?	Yes _____	No <u>X</u>

If yes, list project title and CALFED number _____

Have you received funding from CVPIA before?	Yes _____	No <u>X</u>
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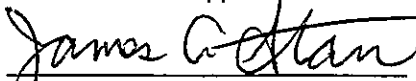
If yes, list CVPIA program providing funding, project title and CVPIA number (if applicable):

By signing below, the applicant declares the following:

- The truthfulness of all representations in their proposal;
- The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and
- The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and Waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

James A. Starr

Printed name of applicant


Signature of applicant

Suisun Marsh Fish Screening Program

Prepared in Response to:

CALFED Bay-Delta Program
2001 Proposal Solicitation Package
Ecosystem Restoration Projects and Programs

Applicant:

California Department of Fish and Game
Central Valley Bay-Delta Branch
4001 North Wilson Way
Stockton, California 95205
Phone (209) 948-7800

Principal Investigator:

James A. Starr, Associate Biologist
California Department of Fish and Game
Central Valley Bay-Delta Branch
4001 North Wilson Way
Stockton, California 95205
Phone (209) 948-7800; Fax (209) 946-6355
e-mail: jstarr@delta.dfg.ca.gov

Type of Organization:

State Agency

Implementation Participants/Collaborators:

Current participants are the California Department of Fish and Game, the California Department of Water Resources, Suisun Resource Conservation District, and U.S. Bureau of Reclamation. Implementation, guidance, and assistance will be provided by Mr. Steve Chappell, Executive Director of the Suisun Resource Conservation and Mr. Dennis Becker Senior Biologist for the Department of Fish and Game.

Executive Summary
Suisun Marsh Fish Screening Program

Applicant:

Mr. James A. Starr
California Department of Fish and Game
Central Valley Bay-Delta Branch
email: jstarr@delta.dfg.ca.gov
Amount Requested: \$920,700.00

4001 North Wilson Way
Stockton, California 95205
Phone (209) 948-7800
FAX (209) 946-6355

Implementation Participants/Collaborators: Current participants are the California Department of Fish and Game (DFG), the California Department of Water Resources (DWR), Suisun Resource Conservation District (SRCD), and U.S. Bureau of Reclamation.

Project Description: The Suisun Marsh Fish Screening Program in conjunction with our cost sharing partners will screen a total of four wetland diversions (two this funding request and two with cost share funds) located in the SRCD. Implementation of this Program will be carried out in two phases over the next year and a half.

Hypothesis: Screening seasonal wetland diversions in the Suisun Marsh will aid in the recovery of listed and special status fish species that either reside in or pass through the Suisun Marsh during their life cycle. In addition, the installation and operation of screens will aid in maintaining seasonal wetlands by allowing water diversions to occur during periods when restrictions are imposed on unscreened diversion operations.

Primary Benefits: This Program will primarily benefit the Suisun Marsh/San Francisco Bay Ecological Management Zone by protecting fish species from being diverted onto seasonal wetlands. Additionally, anadromous fish that are prevented from entering seasonal wetlands in the Suisun Marsh will continue to rear and return as adults to spawn in the Sacramento, San Joaquin, and Delta ecological management zones. The species that will benefit from this Program are winter-run and spring-run chinook salmon, delta smelt, splittail, and other listed and special status species. This Program will also assist CALFED in meeting seasonal wetland targets for the Suisun Marsh Ecological Zone.

Proposed Approach: Our approach is two fold, in that, we want to maintain both seasonal wetland function and prevent the diversion of listed and special status fish species. Phase I will be to identify diversions to be screened. Phase II will be to construct and install fish screens at the selected sites.

Coordination with CALFED ERPP Goals: This Program will help promote three of the six Ecosystem Restoration Strategic Goals. Goal 1-At Risk Species: This Program will aid in the recovery of several listed species. Goal 2-Ecosystem Processes and Biotic Communities: This Program will indirectly assist in maintaining self-sustaining seasonal wetland ecosystem. Goal 3 - Maintain and Enhance Populations of Selected Species: The Suisun Marsh Fish Screening Program is expected to aid in maintaining and enhancing populations of commercial and recreational species that utilize the Suisun Marsh during a portion or all of their life cycle.

Suisun Marsh Fish Screening Program

Project Description

Statement of Problem

Problem

Listed and non-listed aquatic organisms that reside in or pass through the Suisun Marsh are susceptible to water diversions related to water management activities. These activities include the diversion of water to maintain both the integrity of seasonal wetlands and farming practices in the Marsh. The management of seasonal wetlands in the Suisun Marsh is growing more and more difficult as additional fish species are listed as either threatened or endangered. The proximity of the Suisun Marsh to the rearing and migratory paths of both listed and non-listed species has resulted in increased restrictions on unscreened diversions used to maintain these seasonal wetlands. This loss of operational flexibility has resulted in a decrease in suitable habitat for migratory waterfowl that use the Suisun Marsh as wintering habitat.

The Suisun Marsh has been diked as either a seasonal wetlands or managed farmland for the last 100 years. The diversion of water to maintain these activities has fallen under tighter regulations to protect listed fish species that are present in the Suisun Marsh. These regulations restrict the time of year and duration of water diversions that maintain these activities.

Objectives

- Identify and screen two seasonal wetland diversions located in the Suisun Marsh. This funding request in conjunction with the funding provided by our cost share partners will screen a total of four diversions in the Suisun Marsh.

Conceptual Model

The conceptual model being used in the Suisun Marsh Fish Screening Program is a fairly simple process that describes what a functioning fish screen can achieve if it is installed and operated properly. A fish screen in the Suisun Marsh will prevent screenable-size fish and aquatic species from being diverted onto seasonal wetlands and ultimately perishing during the management practices of seasonal wetlands. These fish and aquatic organisms that are prevented from entering the seasonal wetlands will continue on their migratory journey or reside in the Marsh and develop into adults. These adults will return and spawn in the ecological zones of the Sacramento-San Joaquin Valley strengthening the population of both listed and non-listed species.

In addition, our screening Program will work in conjunction with other proposed programs in the Suisun Marsh that are designed to restore the natural function of the Marsh. Tidal wetland and shallow water habitats will benefit from the operation of strategically placed fish screens in the Marsh by restricting screenable-size fish from entering adjacent seasonal wetlands areas. These aquatic organisms that are excluded from entering seasonal wetlands will ultimately use the

restored shallow-water and tidal wetlands habitats as feeding and rearing grounds prior to becoming adults or continuing on their migratory routes.

There are some uncertainties in applying this conceptual model to real-life situations. The first uncertainty is that while fish screens can successfully prevent organisms that are larger than 20 mm, eggs and larvae are still vulnerable to diversions. The second uncertainty is that fish screens in tidal environments can not meet the approach velocity established by the fishery agencies.

These uncertainties are and have been addressed in earlier screening projects conducted in the Suisun Marsh.

- While screening technologies are not perfect, no technology currently exists that can successfully screen organisms smaller than 20 mm.
- The last uncertainty has been addressed in earlier screening programs within the Suisun Marsh. Fish screens have been successfully installed and operated for the past 4 years. These screens have been evaluated by the fishery agencies to assure that they do meet the established approach velocities for delta smelt (0.2 fps).

Hypothesis

The hypothesis being tested by this Program is as follows: Preventing aquatic species from entering seasonal wetlands will aid in the recovery of listed and special status aquatic species in all CALFED ecological zones. Testing this hypothesis through the installation and operation of fish screens in the Suisun Marsh will address three of the ERP's Strategic Goals.

Goal 1 - At Risk Species: The Suisun Marsh Fish Screening Program is expected to aid in the recovery of several listed and special status species by preventing the diversion of listed and special status aquatic species onto unscreened seasonal wetlands. Some of the species that will benefit from the installation and operation of fish screens are: winter-run and spring-run chinook salmon, delta smelt, and splittail.

Goal 3 - Maintain and Enhance Populations of Selected Species: The Suisun Marsh Fish Screening Program is expected to aid in maintaining and enhancing populations of commercial and recreational species that utilize the Suisun Marsh during a portion or all of their life cycle. Some of the species that will benefit from the installation and operation of fish screens are: striped bass, white sturgeon, Pacific herring, and terrestrial species such as waterfowl.

Indirectly, the Suisun Marsh Fish Screening Program will assist CALFED in achieving Goal 2 - **Ecosystem Processes and Biotic Communities:** The proposed screening Program will assist in restoring ecosystem function by preventing aquatic species from moving outside of the nutrient

rich rearing environments and into seasonal wetlands. These species will then utilize the shallow water and tidal marsh habitats being reestablished by CALFED.

Adaptive Management

Earlier screening programs in the Suisun Marsh have had both successes and failures at developing and implementing a fish screening system that can operate in a tidal environment. Currently, the use of adaptive management has assisted both design engineers and biologist to develop a conical fish screen design that can meet the prescribed screening approach velocities in a tidal environment. These adaptive changes will be employed to assure that the best quality fish screening system is utilized in our screening Program.

Proposed Scope of Work

Location of Project

The Suisun Marsh Fish Screening Program will be implemented on two unscreened diversions in the area defined as the Suisun Marsh (Figure 1). The precise locations for the fish screens have yet to be determined, however, a selection process will be implemented to select potential candidates. The location where the fish screens will be installed are accessible to the public, however most of the areas of the Marsh are under private ownership with public access only available via water.

Project Approach

Project phases: This Program as described is expected to occur in two phases with all phases being completed under this proposal.

Phase I will entail locating willing land-owners in the Suisun Marsh who will assume the responsibility of operations and maintenance. A second criteria that will be used, should we receive more than four willing participants, is the proximity of the water diversion to current and/or proposed habitat restoration projects both shallow water and a tidal habitats.

Phase II will be the process of constructing and installing a fish screen that meets the necessary water needs while maintaining the appropriate approach velocities.

The Department of Fish and Game along with the National Marine Fisheries Service will evaluate the effectiveness of the fish screen at meeting approach velocities under a variety of operating conditions

Monitoring and Assessment Plans

No monitoring or assessment plans will be developed, however the Department of Fish and Game and the National Marine Fisheries Service will test and evaluate the installed fish screen. This evaluation will occur over a variety of operating and tidal conditions.

Data Handling and Storage

Designs and data, once the Program begins, will be compiled and stored by Mr. James A. Starr, Associate Biologist with the California Department of Fish and Game. Progress statements will be made accessible through the Central Valley Bay-Delta Web Page at www.delta.dfg.ca.gov.

Expected Products/Outcomes

Expected products of this Program are all environmental documentation and permits necessary to begin construction of the project. An EA/IS will be prepared and a Negative Declaration and FONSI are expected. However this list may include, but is not limited to, documents such as an Environmental Impact Report, a CDFG Streambed Alteration Permit, an incidental take permit, and an USCOE 404 permit.

Work Schedule

Work on Phase I will begin immediately once funding has been approved by the CALFED process. Phase I is expected to be completed on or before January 2001. Phase II will begin once suitable sites have been identified and agreements signed with the landowner. Installation of the fish screens is expected to be completed by November 2001.

Feasibility

The Suisun Resource Conservation District has gained valuable stakeholder support for the installation and operation of fish screens within the Suisun Marsh. This stakeholder support will assist us in finding suitable locations to meet our projected time lines for the installation and successful operation of up to two fish screens.

Applicability to CALFED ERP Goals

ERP Goals

Goal 1 - At Risk Species: The Suisun Marsh Fish Screening Program is expected to aid in the recovery of several listed and special status species by preventing early life stages of aquatic organisms from entering seasonal wetlands via unscreened diversions. Some of the species that will benefit from this Program are: winter-run and spring-run chinook salmon, delta smelt, and splittail.

Goal 3 - Maintain and Enhance Populations of Selected Species: The Suisun Marsh Fish Screening Program is expected to aid in maintaining and enhancing populations of commercial and recreational species that utilize the Suisun Marsh during a portion or all of their life cycle. Some of the species that will benefit from the installation and operation of fish screens are: striped bass, white sturgeon, Pacific herring, and terrestrial species such as waterfowl.

Indirectly, the Suisun Marsh Fish Screening Program will assist CALFED in achieving Goal 2 - Ecosystem Processes and Biotic Communities: The proposed screening Program will assist in restoring ecosystem function by preventing aquatic species from moving outside of the nutrient rich rearing environments and into seasonal wetlands. These species will then utilize the shallow water and tidal marsh habitats being reestablished by CALFED.

Compatibility with Non-Ecosystem Objectives

The proposed project is compatible with the objectives of the other CALFED programs.

Relationship to Other Ecosystem Restoration Projects

While this Program is not a restoration activity, it does indirectly tie back into ecosystem restoration projects. This Program will assist habitat restoration activities in restoring the function of the ecosystem by keeping aquatic organisms in the channels and streams of the Suisun Marsh.

Request for Next-Phase Funding

No additional funds will be requested to complete this Program once funding is established by the CALFED Ecosystem Restoration Projects and Programs.

System-Wide Ecosystem Benefits

This Program will benefit the system by excluding both listed and non-listed fish species from entering seasonal wetlands and becoming genetically isolated from the remainder of the population. Fish that are excluded from seasonal wetlands as juveniles will be available to utilize restoration projects that restore the function to both tidally influenced wetlands and shallow water habitat in proximity to the screened diversion. When excluded juvenile become adults they will benefit from added restoration efforts that occur in the waterways where they return to spawn. These activities include, but are not limited to, gravel replenishment activities, increased shaded riparian habitat, and development of flooded vegetation. Another system benefit will be that aquatic species populations of commercial value will increase over time.

Applicant Qualifications

The CDFG has extensive experience in developing and evaluating fish screens both in the Suisun Marsh and other waterways of the State.

Mr. Steve Chappell is the Executive Director for the Suisun Resource Conservation District and has developed extensive stakeholder support and contact for activities that either occur or impact the Suisun Marsh. Mr. Dennis Becker is a Senior Biologist for the Department of Fish and Game and is the Departments expert with regards to environmental and resource issues in the Suisun Marsh.

Summary of Qualifications of Principal Participants

Name: **James A. Starr**

Position: Associate Biologist, Department of Fish and Game,
Central Valley Bay-Delta Branch - Special Water Projects Unit

Education: Bachelor of Science, Wildlife management, Arizona State University,
Tempe, May 1987

Experience

1991 - Present Water Project Planning Unit, duties include:

- Perform impact analyses on existing and proposed water development plans by DWR for the Sacramento-San Joaquin Delta.
- Member of the CALFED Suisun Marsh Levee Investigations Team.
- Lead on conducting studies to evaluate the fishery impacts associated with proposed State Water Project actions.
- Conducted the Suisun Marsh diversion monitoring program as part of the Suisun Resource Conservation District's General Permit.
- Develop and issue Streambed Alteration Agreements on various State and public projects located in the Sacramento-San Joaquin Estuary.

Name: **Frank G. Wernette**

Position: Environmental Specialist IV, Department of Fish and Game,
Central Valley Bay-Delta Branch - Special Water Projects Unit

Education: Bachelor of Science, Wildlife Management, California State University,
Humboldt, June 1973

Experience:

1990 - Present: Supervisor of the Water Project Planning and Evaluation Unit. Responsible for the evaluation of proposed State Water Project water storage and conveyance projects throughout the State with an emphasis on the Sacramento-San Joaquin Delta. Oversees analysis of fish and wildlife impacts associated with water project development. Currently assists the CALFED Bay-Delta Program in developing the comprehensive Ecosystem Restoration Program Plan for CALFED. Acts as the Department's technical lead in assessing fish and wildlife impacts of the Delta Wetlands Project and developing appropriate mitigation measures to offset impacts.

1980 - 1990: Fish and Game representative on Suisun Marsh Technical Committee. Responsible for providing wildlife input to the committee for the purpose of planning and implementing the Suisun Marsh Plan of Protection. Also, responsible for performing wildlife habitat monitoring studies in the Suisun Marsh. Participated in negotiations for the Suisun Marsh Preservation Agreement by providing technical wildlife input to the principal Department of Fish and Game negotiators.

1975 - 1980: Wildlife Biologist, Region 2, Department of Fish and Game. Lodi Unit Manager responsible for all wildlife related issues in San Joaquin, Calaveras and western Alpine counties. Primary focus on wildlife and wildlife habitat issues in the Sacramento-San Joaquin Delta.

1973 - 1975: Wildlife Biologist, Region 2. Assigned to trainee position and assisted with various fish and wildlife projects throughout Region 2.

Publications: Wernette, F.G. 1985. The 1981 Suisun Marsh Vegetation Survey. Interagency Ecological Study Program for the Sacramento-San Joaquin Estuary. Technical Report #10. 23 p.

Cost Budget

A. Summary Budget

Calfed funds are requested to provide funding for the Service Contract for the construction and installation of fish screens.

B. Detail Budget

Personnel Budget

Task 1. Location Determination				
Personnel	Direct Labor Hours	Total Salary	Total Benefits (20.48%)	Totals
Associate Biologist	40 hours	0.00	0.00	0.00
Task 1. Total				0.00
Task 2. Construction				
	Service Contract			
Task 2. Total	750,000.00			

Total Budget (CALFED) funds only

Direct Salary and Benefits	Service Contract	Material and Permit Fees	Miscellaneous and other Direct Costs	Overhead and Indirect Costs (18.54%)	Total Cost
0.00	750,000.00			170,700.00	\$920,700.00

Cost-Sharing

The Department of Fish and Game is willing to donate the Associate Biologist time and equivalent pay of \$1,600.00 to cover the cost associated with implementing both phases I and II of the Suisun Marsh Fish Screening Program. The DFG has obtained \$500,000.00 in matching funds from the Proposition 204 Program for the installation of up to one screen in the Suisun Marsh. In addition, the DFG has obtained \$380,000.00 from the Tracy Fish Facility Agreement for the installation of one fish screen in the Suisun Marsh.

The total in cost sharing funds equals approximately **\$881,600.00** for the installation of fish screens in the Suisun Marsh over the next fiscal year (00-01).

Local Involvement

The proposed project is also supported by Suisun Resources Conservation District, the Department of Fish and Game's Central Coast Region and the Central Valley Bay-Delta Branch offices.

The following agencies have been mailed copies of this proposal. The cover letters can be found in Attachment A.

Barry Munowitch
Suisun City Planning Department
Suisun City

Solano County Environmental Management
Planning Department
Solano County

Jeffrey Blanchfield
Chief Planner
San Francisco Bay Conservation and Development Commission (BCDC)

Mr. Steve Chappell, Executive Director
Suisun Resource Conservation District

Compliance with Standard Terms and Conditions

No specific deviations from contractual terms and conditions are required for implementation of this Program at this time. Should this project move forward, all terms and contracts will be written and submitted to CALFED for approval. The DFG is not aware of any potential conflicts of interest. A completed Form DI-2010 is included in Attachment B of this proposal.

Literature Cited

None

ATTACHMENT A



DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>

Central Valley Bay-Delta Branch
4001 North Wilson Way
Stockton, California 95205
(209) 948-7800



May 9, 2000

Mr. Barry Munowitch
Suisun City Planning Department
701 Civic Center Boulevard
Suisun City, California 94585

Mr. Munowitch:

The California Department of Fish and Game is submitting a request to the CALFED Ecosystem Restoration Program to funding the construction of two fish screens in the Suisun Marsh. While we have not determined where these fish screens will be placed, they will be located within the Suisun Resource Conservation District boundary. We will keep your office informed as to the final location of our proposed fish screens should our Program receive CALFED funding.

In order for you to get a better idea of the project and its goals, a copy of our proposal is enclosed. We look forward to working closely with you in the near future. If you have any questions feel free to contact me at (209) 942-6070.

Sincerely,

ORIGINAL SIGNED BY

James A Starr
Associate Biologist

Enclosure

JS00e127.wpd/ef

Conserving California's Wildlife Since 1870



DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>

Central Valley Bay-Delta Branch
4001 North Wilson Way
Stockton, California 95205
(209) 948-7800



May 9, 2000

Environmental Management
Solano County Planning Department
601 Texas Street
Fairfield, California 94533

Solano County Planning Department:

The California Department of Fish and Game is submitting a request to the CALFED Ecosystem Restoration Program to funding the construction of two fish screens in the Suisun Marsh. While we have not determined where these fish screens will be placed, they will be located within the Suisun Resource Conservation District boundary. We will keep your office informed as to the final location of our proposed fish screens should our Program receive CALFED funding.

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Sincerely,

ORIGINAL SIGNED BY

James A. Starr
Associate Biologist

Enclosure

JS00e127.wpd/ef

Conserving California's Wildlife Since 1870



DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>

Central Valley Bay-Delta Branch
4001 North Wilson Way
Stockton, California 95205
(209) 948-7800



May 9, 2000

Mr. Steven Chappell, Executive Director
Suisun Resource Conservation District
2544 Grizzly Island Road
Suisun, California 94585

Dear Mr. Chappell:

The California Department of Fish and Game is submitting a request to the CALFED Ecosystem Restoration Program to funding the construction of two fish screens in the Suisun Marsh. While we have not determined where these fish screens will be placed, they will be located within the Suisun Resource Conservation District boundary. We will keep your office informed as to the final location of our proposed fish screens should our Program receive CALFED funding.

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Sincerely,

ORIGINAL SIGNED BY

James A. Starr
Associate Biologist

Enclosure

JS00e127.wpd/ef

Conserving California's Wildlife Since 1870



DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>

Central Valley Bay-Delta Branch
4001 North Wilson Way
Stockton, California 95205
(209) 948-7800



May 9, 2000

Mr. Jeffrey Blanchfield, Chief Planner
San Francisco Bay Conservation and Development Commission
30 Van Ness Avenue, Suite 2011
San Francisco, California 94102

Mr. Blanchfield:

The California Department of Fish and Game is submitting a request to the CALFED Ecosystem Restoration Program to funding the construction of two fish screens in the Suisun Marsh. While we have not determined where these fish screens will be placed, they will be located within the Suisun Resource Conservation District boundary. We will keep your office informed as to the final location of our proposed fish screens should our Program receive CALFED funding.

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Sincerely,

ORIGINAL SIGNED BY

James A. Starr
Associate Biologist

Enclosure

JS00e127.wpd/ef

Conserving California's Wildlife Since 1870

Environmental Compliance Checklist

All applicants must fill out this Environmental Compliance Checklist. Applications must contain answers to the following questions to be responsive and to be considered for funding. Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.

1. Do any of the actions included in the proposal require compliance with either the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA) or both?

XX
YES

NO

2. If you answered yes to #1, identify the lead governmental agency for the CEQA/NEPA compliance.

California Department of Fish and Game
Lead Agency

3. If you answered no to #1, explain why CEQA/NEPA compliance is not required for the actions in the proposal.

4. If CEQA/NEPA compliance is required, describe how the project will comply with either or both of these laws. Describe where the project is in the compliance process and the expected date of completion.

The DFG has prepared a Negative Declaration to cover the installation of fish screens in the Suisun Marsh. In addition, DFG's activities will have to be coordinated with the Suisun Resource Conservation District so that, fish screens will comply with SRCD's General Permit issued from the U. S. Army Corps of Engineers.

5. Will the applicant require access across public or private property that the applicant does not own to accomplish the activities in the proposal?

YES

NO XX

If yes, the applicant must attach written permission for access from the relevant property owner(s). Failure to include written permission for access may result in disqualification of the proposal during the review process. Research and monitoring field projects for which specific field locations have not been identified will be required to provide access needs and permission for access with 30 days of notification of approval.

6. Please indicate what permits or other approvals may be required for the activities contained in your proposal. Check all boxes that apply.

LOCAL

Conditional use permit	_____
Variance	_____
Subdivision Map Act approval	_____
Grading permit	_____
General plan amendment	_____
Specific plan approval	_____
Rezone	_____
Williamson Act Contract cancellation	_____
Other _____ (Please specify)	
None required	<u>XX</u>

STATE

CESA Compliance	<u>XX</u>	(CDFG)
Streambed alteration permit	<u>XX</u>	(CDFG)
CWA § 401 certification	_____	(RWQCB)
Coastal development permit	_____	(Coastal Commission/BCDC)
Reclamation Board approval	_____	
Notification	_____	(DPC, BCDC)
Other _____ (Please specify)		
None required	_____	

FEDERAL

ESA Consultation	_____	(USFWS)
Rivers & Harbors Act permit	_____	(ACOE)
CWA § 404 permit	<u>XX</u>	(ACOE)
Other _____ (Please specify)		
None required	_____	

DPC = Delta Protection Commission
CWA = Clean Water Act
CESA = California Endangered Species Act
USFWS = U.S. Fish and Wildlife Service
ACOE = U.S. Army Corps of Engineers

ESA = Endangered Species Act
CDFG = California Department of Fish and Game
RWQCB = Regional Water Quality Control Board
BCDC = Bay Conservation and Development
Comm.

Land Use Checklist

All applicants must fill out this Environmental Compliance Checklist. Applications must contain answers to the following questions to be responsive and to be considered for funding. Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.

1. Do the actions in the proposal involve physical changes to the land(i.e. grading, planting vegetation, or breaching levees) or restrictions in land use (i.e. conservation easement or placement of land in a wildlife refuge?)

XX
YES

NO

2. If NO to #1, explain what type of actions are involved in the proposal (i.e. research only, planning only).

3. If YES to #1, what is the proposed land use change or restriction under the proposal?

Construction of the fish screen will involve a temporary breaching of the levee to replace the existing structure and install the fish screen. This activity to breach the levee will occur at low tide and be completely sealed prior to the in-coming high tide.

4. If YES to #1, is the land currently under a Williamson Act contract?

YES

NO XX

5. If YES to #1, answer the following

Current land use

Current zoning

Current general plan designation

6. If YES to #1, is the land classified as Prime Farmland, Farmland of Statewide Importance or Unique Farmland on the Department of Conservation Important Farmland Maps?

YES

NO

7. If YES to #1, how many acres of Land will be subject to physical change or land use restrictions under the proposal? Zero acres

8. If YES to #1, is the property currently being commercially farmed or grazed?

YES

NO XX

9. If YES to #8, what are the number of employees/acre _____
the total number of employees _____

10. Will the applicant acquire any interest in land under the proposal (fee title or a conservation easement)?

YES _____

NO XX

11. What entity/organization will hold the interest? _____

12. If Yes to #10, answer the following:

Total number of acres to be acquired under proposal _____

Number of acres to be acquired in fee _____

Number of acres to be subject to conservation easement _____

13. For all proposals involving physical changes to the land or restriction in land use, describe what entity or organization will:

Manage the property _____

Provide operations and maintenance services _____

Conduct monitoring _____

14. For land acquisitions (fee title or easements), will existing water rights also be acquired?

YES _____

NO _____

15. Does the applicant propose any modifications to the water right or change in the delivery of the water?

YES _____

NO XX

16. If YES to #15, describe _____

ATTACHMENT B

Agreement No.: _____

Exhibit: _____

**STANDARD CLAUSES –
INTERAGENCY AGREEMENTS**

Audit Clause. For Agreements in excess of \$10,000, the parties shall be subject to the examination and audit of the State Auditor for a period of three years after final payment under the Agreement. (Government Code Section 8546.7).

Availability of Funds. Work to be performed under this Agreement is subject to availability of funds through the State's normal budget process.

Interagency Payment Clause. For services provided under this Agreement, charges will be computed in accordance with State Administrative Manual Sections 8752 and 8752.1.

Termination Clause. Either State agency may terminate this Agreement upon thirty (30) days' advance written notice. The State agency providing the services shall be reimbursed for all reasonable expenses incurred up to the date of termination.

Severability. If any provision of this Agreement is held invalid or unenforceable by any court of final jurisdiction, it is the intent of the parties that all other provisions of this Agreement be construed to remain fully valid, enforceable, and binding on the parties.

Y2K Language. The Contractor warrants and represents that the goods or services sold, leased, or licensed to the State of California, its agencies, or its political subdivisions, pursuant to this Agreement are "Year 2000 compliant" For purposes of this Agreement, a good or service is Year 2000 compliant if it will continue to fully function before, at, and after the Year 2000 without interruption and, if applicable, with full ability to accurately and unambiguously process, display, compare, calculate, manipulate, and otherwise utilize date information. This warranty and representation supersedes all warranty disclaimers and limitations and all limitations on liability provided by or through the Contractor.

APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

		2. DATE SUBMITTED	Applicant Identifier
1. TYPE OF SUBMISSION:		3. DATE RECEIVED BY STATE	State Application Identifier
Application <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction	Preapplication <input checked="" type="checkbox"/> Construction <input type="checkbox"/> Non-Construction	4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier

5. APPLICANT INFORMATION

Legal Name: California Department of Fish and Game	Organizational Unit: Central Valley Bay-Delta Branch
Address (give city, county, State, and zip code): 4001 North Wilson Way Stockton, California 95205	Name and telephone number of person to be contacted on matters involving this application (give area code): James Starr (209) 942-6070

6. EMPLOYER IDENTIFICATION NUMBER (EIN):
94 - 1697567

8. TYPE OF APPLICATION:

☒ New ☐ Continuation ☐ Revision

If Revision, enter appropriate letter(s) in box(es)

A. Increase Award B. Decrease Award C. Increase Duration
 D. Decrease Duration Other(specify): _____

7. TYPE OF APPLICANT: (enter appropriate letter in box) A

A. State	H. Independent School Dist.
B. County	I. State Controlled Institution of Higher Learning
C. Municipal	J. Private University
D. Township	K. Indian Tribe
E. Interstate	L. Individual
F. Intermunicipal	M. Profit Organization
G. Special District	N. Other (Specify) _____

9. NAME OF FEDERAL AGENCY:

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:

-

TITLE: _____

11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:
Suisun Marsh Fish Screen Program

12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.):
Solano County, California

13. PROPOSED PROJECT	14. CONGRESSIONAL DISTRICTS OF:	
Start Date Ending Date	a. Applicant California 11th District	b. Project California 7th District

15. ESTIMATED FUNDING:

a. Federal	\$	920,700 ⁰⁰
b. Applicant	\$	00 ⁰⁰
c. State	\$	00 ⁰⁰
d. Local	\$	00 ⁰⁰
e. Other	\$	00 ⁰⁰
f. Program Income	\$	00 ⁰⁰
g. TOTAL	\$	920,700.00 ⁰⁰

16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?

a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:

DATE _____

b. No. ☐ PROGRAM IS NOT COVERED BY E. O. 12372
☐ OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?

☐ Yes If "Yes," attach an explanation. ☒ No

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

a. Type Name of Authorized Representative Dr. Perry Herrgesell	b. Title Branch Chief	c. Telephone Number 209-948-7800
d. Signature of Authorized Representative 		e. Date Signed 5/19/00

BUDGET INFORMATION - Construction Programs

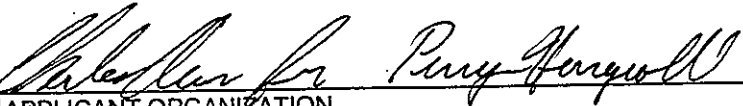
NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case, you will be notified.

COST CLASSIFICATION	a. Total Cost	b. Costs Not Allowable for Participation	c. Total Allowable Costs (Columns a-b)
1. Administrative and legal expenses	\$.00	\$.00	\$.00
2. Land, structures, rights-of-way, appraisals, etc.	\$.00	\$.00	\$.00
3. Relocation expenses and payments	\$.00	\$.00	\$.00
4. Architectural and engineering fees	\$.00	\$.00	\$.00
5. Other architectural and engineering fees	\$.00	\$.00	\$.00
6. Project inspection fees	\$.00	\$.00	\$.00
7. Site work	\$.00	\$.00	\$.00
8. Demolition and removal	\$.00	\$.00	\$.00
9. Construction	\$ 920,700.00	\$.00	\$ 920,700.00
10. Equipment	\$.00	\$.00	\$.00
11. Miscellaneous	\$.00	\$.00	\$.00
12. SUBTOTAL (sum of lines 1-11)	\$ 920,700.00	\$.00	\$ 920,700.00
13. Contingencies	\$.00	\$.00	\$.00
14. SUBTOTAL	\$ 920,700.00	\$.00	\$ 920,700.00
15. Project (program) income	\$.00	\$.00	\$.00
16. TOTAL PROJECT COSTS (subtract #15 from #14)	\$ 920,700.00	\$.00	\$ 920,700.00
FEDERAL FUNDING			
17. Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share.) Enter the resulting Federal share.	Enter eligible costs from line 16c Multiply X _____%		\$.00

11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333) regarding labor standards for federally-assisted construction subagreements.
14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the

National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL		TITLE	
		Branch Chief	
APPLICANT ORGANIZATION		DATE SUBMITTED	
California Department of Fish and Game		5/9/00	

U.S. Department of the Interior

**Certifications Regarding Debarment, Suspension and
Other Responsibility Matters, Drug-Free Workplace
Requirements and Lobbying**

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used; use this form for certification and sign; or use Department of the Interior Form 1954 (DI-1954). (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12.)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

**PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters -
Primary Covered Transactions**

CHECK ☒ IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -
Lower Tier Covered Transactions**

CHECK ☒ IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

PART C: Certification Regarding Drug-Free Workplace Requirements

CHECK ☒ IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.

Alternate I. (Grantees Other Than Individuals)**A. The grantee certifies that it will or continue to provide a drug-free workplace by:**

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an ongoing drug-free awareness program to inform employees about--
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will --
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted --
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

Check ☐ if there are workplaces on file that are not identified here.

PART D: Certification Regarding Drug-Free Workplace Requirements

CHECK ☒ IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL.

Alternate II. (Grantees Who Are Individuals)

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

PART E: Certification Regarding Lobbying
Certification for Contracts, Grants, Loans, and Cooperative Agreements

CHECK ☒ IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT, SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

CHECK ☒ IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.

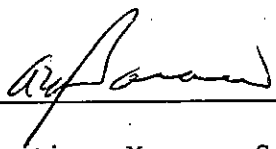
The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL



TYPED NAME AND TITLE Alan Baracco, Operations Manager Central Valley Bay-Delta Branch

DATE

5-11-00